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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,973	12/30/2003	Kei-Kang Hung	JLINP093.DIV1	9691
25920	7590	10/13/2004	EXAMINER	
MARTINE & PENILLA, LLP			NADAV, ORI	
710 LAKEWAY DRIVE			ART UNIT	
SUITE 170			PAPER NUMBER	
SUNNYVALE, CA 94085			2811	

DATE MAILED: 10/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/749,973

Applicant(s)

HUNG ET AL

Examiner

ori nadav

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The embodiment of figure 4 recites a first resistor having one end electrically connected to a gate of said first MOS transistor and the other end grounded, and a second resistor having one end electrically connected to a gate of said second MOS transistor and the other end grounded, wherein a resistance value of said first resistor is greater than that of said second resistor. However, the embodiment of figure 4 does not recite a first MOS transistor and said second MOS transistor are arranged alternatively.

Therefore, there is no support in the specification for an embodiment which teaches a first resistor having one end electrically connected to a gate of said first MOS transistor and the other end grounded, and a second resistor having one end electrically connected to a gate of said second MOS transistor and the other end grounded, wherein a resistance value of said first resistor is

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greater than that of said second resistor, and a first MOS transistor and said second MOS transistor are arranged alternatively, as recited in claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Duvvury et al. (6,667,865).
Duvvury et al. teach in figure 4 and related text a semiconductor device with ESD protection comprising:

a guard ring 404;

a MOS transistor array formed in a region surrounded by said guard ring and comprising a first MOS transistor 412 and a second MOS transistor 410, wherein said first MOS transistor is closer to said guard ring than said second MOS transistor is in a horizontal direction in which said first MOS transistor and said second MOS transistor are arranged alternatively.

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a first resistor 512 (see figure 5) having one end electrically connected to a gate of said first MOS transistor and the other end grounded; and

a second resistor 310 having one end electrically connected to a gate of said second MOS transistor and the other end grounded, wherein a resistance value of said first resistor is greater than that of said second resistor.

Regarding the claimed limitation of a first MOS transistor being closer to the guard ring than a second MOS transistor, this limitation is inherent in the device of Duvvury et al., because the first MOS transistor Duvvury et al. is located closer to the left part of guard ring 401 than the second MOS transistor.

Response to Arguments

Applicant argues that Duvvury et al. do not teach the claimed invention, because resistor 512 has one end connected to a gate of a MOS transistor and the other end connected to a source of the same MOS transistor, that is, both ends of resistor 512 are connected to the same MOS transistor, wherein one end of the resistor 310 is connected to a plurality of MOS transistors. Thus, the connection types between resistors 310, 512 and other devices are different from that of the invention.

Although Duvvury et al. teach the connection types between resistors 310, 512 and other devices are different from that of the invention, the claimed invention is still anticipated by Duvvury et al., because Duvvury et al. teach a first resistor 512 having one end electrically connected to a gate of said

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first MOS transistor and the other end grounded, and a second resistor 310 having one end electrically connected to a gate of said second MOS transistor and the other end grounded, wherein a resistance value of said first resistor is greater than that of said second resistor, as claimed.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Papers related to this application may be submitted to Technology center (TC) 2800 by facsimile transmission. Papers should be faxed to TC 2800 via the TC 2800 Fax center located in Crystal Plaza 4, room 4-C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Group 2811 Fax Center number is (703) 308-7722 and 308-7724. The Group 2811 Fax Center is to be used only for papers related to Group 2811 applications.

Any inquiry concerning this communication or any earlier communication from the Examiner should be directed to *Examiner Nadav* whose telephone number is **(703) 308-8138**. The Examiner is in the Office generally between the hours of 7 AM to 4 PM (Eastern Standard Time) Monday through Friday.

Any inquiry of a general nature or relating to the status of this application should be directed to the **Technology Center Receptionists** whose telephone number is **308-0956**



O.N.
10/7/04

ORI NADAV
PRIMARY EXAMINER
TECHNOLOGY CENTER 2800